

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number
WO 2004/023903 A3

(51) International Patent Classification⁷: A24D 3/16, 1/00

(21) International Application Number:

PCT/CA2003/001332

(22) International Filing Date:

12 September 2003 (12.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/410,266 13 September 2002 (13.09.2002) US

(71) Applicant (for all designated States except US): ROTH-
MANS, BENSON & HEDGES INC. [CA/CA]; 1500 Don
Mills Road, North York, Ontario M3B 3L1 (CA).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SNAIDR, Stanislav,
M. [CA/CA]; 4155 Sharonton Court, Mississauga, Ontario
L5L 1Y9 (CA).

(74) Agent: WOODLEY, John, H.; Sim & McBurney, 6th
Floor, 330 University Avenue, Toronto, Ontario M5G 1R7
(CA).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:

10 June 2004

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: CERIA/ZIRCONIA FIBRES FOR USE IN CIGARETTES

(57) Abstract: Ceria/zirconia fibres are incorporated into a variety of smokable articles or their separate individual components, in particular, cigarette components such as a cigarette paper/wrapper, tobacco, and/or filter.

WO 2004/023903 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 03/01332

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A24D3/16 A24D1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A24D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, COMPENDEX, FSTA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/062834 A1 (SNAIDR STANISLAV M ET AL) 30 May 2002 (2002-05-30) paragraph '0039! paragraph '0079!; claim 3	1-20
A	WO 02 24005 A (ROTHMANS, BENSON & HEDGES INC.) 28 March 2002 (2002-03-28) cited in the application claims 1,4-6	1-20
A	US 4 915 117 A (ITO MIDORI) 10 April 1990 (1990-04-10) cited in the application claims 1,2,10-13	1-20

-/--

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

G document member of the same patent family

Date of the actual completion of the international search

12 March 2004

Date of mailing of the international search report

23/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Pille, S

INTERNATIONAL SEARCH REPORT

Internati plication No
PCT/CA 03/01332

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 927 622 A (SIVANANDA JADA S) 22 May 1990 (1990-05-22) cited in the application the whole document	1
P, A	US 2003/069132 A1 (WOODHEAD JAMES L) 10 April 2003 (2003-04-10) cited in the application the whole document.	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/CA 03/01332

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002062834	A1	30-05-2002	AU 9156701 A	02-04-2002
			AU 9156801 A	02-04-2002
			BR 0114463 A	13-01-2004
			WO 0224005 A2	28-03-2002
			WO 0224006 A2	28-03-2002
			CA 2421177 A1	28-03-2002
			CA 2421192 A1	28-03-2002
			CN 1474660 T	11-02-2004
			CN 1474661 T	11-02-2004
			EP 1318727 A2	18-06-2003
			EP 1318728 A2	18-06-2003
			NO 20031186 A	19-05-2003
			NO 20031187 A	15-05-2003
			TW 550051 B	01-09-2003
			TW 550052 B	01-09-2003
			US 2003037792 A1	27-02-2003
WO 0224005	A	28-03-2002	AU 9156701 A	02-04-2002
			AU 9156801 A	02-04-2002
			BR 0114463 A	13-01-2004
			WO 0224005 A2	28-03-2002
			WO 0224006 A2	28-03-2002
			CA 2421177 A1	28-03-2002
			CA 2421192 A1	28-03-2002
			CN 1474660 T	11-02-2004
			CN 1474661 T	11-02-2004
			EP 1318727 A2	18-06-2003
			EP 1318728 A2	18-06-2003
			NO 20031186 A	19-05-2003
			NO 20031187 A	15-05-2003
			TW 550051 B	01-09-2003
			TW 550052 B	01-09-2003
			US 2002062834 A1	30-05-2002
			US 2003037792 A1	27-02-2003
US 4915117	A	10-04-1990	JP 1039979 A	10-02-1989
			JP 2720155 B2	25-02-1998
US 4927622	A	22-05-1990	JP 1061323 A	08-03-1989
			JP 4074289 B	25-11-1992
			KR 9104838 B1	13-07-1991
			US 5053214 A	01-10-1991
			US 5112781 A	12-05-1992
US 2003069132	A1	10-04-2003	WO 03023096 A1	20-03-2003